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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/797,548      | 03/10/2004  | Edmund J. Madaj      | MBC-0507            | 4404             |

23575 7590 12/20/2006  
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CLEVELAND, OH 44145

| EXAMINER |
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NILAND, PATRICK DENNIS

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1714

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 12/20/2006 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/797,548 | <b>Applicant(s)</b><br>MADAJ, EDMUND J. |  |
|                              | <b>Examiner</b><br>Patrick D. Niland | <b>Art Unit</b><br>1714                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-78 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37-65 and 69-78 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 10-36 and 66-68 is/are rejected.
- 7) ☒ Claim(s) 5 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/04</u> . | 6) <input type="checkbox"/> Other: ____  |

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1. Claims 66-68 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The above claims depend from claim 37 which is directed to a "multicomponent formulation". The above claims are directed to "a polyurethane sealant". It is unclear how and if these claims further limit the claims from which they depend. It is further unclear if there is a distinction intended between the claimed recitations of "multicomponent formulation" and "polyurethane sealant", such as whether or not the "polyurethane sealant is intended to be the cured product or the reaction product as claimed in claim 1 rather than the "multicomponent formulation".

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6-8, 10-25, 35-36, and 67-68 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 5925781 Pantone et al..

Pantone discloses the reaction product of a polyether polyol, toluene diisocyanate, and diphenylmethane diisocyanate which falls within the scope of the reactant of the instant claims.

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It is noted that it is not made from the intermediates of the instant claims. However, it is not seen that the final products of the instant claims and the patentee are distinguishable based on the difference in intermediates used to make them because the two final products would both be expected to have the same moieties within them after the reaction has completed based on the natures of the two reactions. Note the abstract; column 4, lines 16-67, particularly 21-23, which falls within the scope of "sealant" and which "flexible" implies the instantly claimed low modulus in the absence of plasticizer, 40-56; column 5, lines 1-67, particularly 31 and 61 of which the lower endpoint reads on the instantly claimed amount of diphenylmethane diisocyanate; column 6, lines 1-67; and the remainder of the document. It is the examiner's position that some paint exists which will adhere to the cured product of the patentee, possibly ones that contain moieties which can react with the endgroups of the patentee's urethane or with the urethane groups themselves, e.g. the hydrogens of the urethane groups, and thus these polymers are necessarily "paintable in the absence of primer". Based on the molecular weights of the polyether polyols of the patentee at column 6, lines 21-30, there would necessarily exist moieties in the patentee's polyurethanes which read on the instant claims 12-21. The patentee is silent regarding the modulus except for the discussion of properties which relate to modulus. The patentee is silent regarding the other properties of the instant claims also. The burden is on the applicant to show that the polyurethanes of the patentee having the properties described by the patentee do not necessarily and inherently possess the moduli of the instant claims 1 and 22 and the tensile strength of the instant claim 23 and the elongation of the instant claim 24 because the PTO has no facilities to do such testing, and the polymers of the patentee appear to be otherwise the same as those of the instant claims and therefore must have the same properties.

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The added polyols C of column 7, lines 42-51 et seq. are the chain extenders of the instant claims 35-36 and 67-68. Claims 67-68 are taken as reading on the reaction product of the multiple components recited in claim 37 based on the preamble language.

5. Claims 1-4, 6-8, 10-36, and 66-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 5925781 Pantone et al..

Pantone discloses the reaction product of a polyether polyol, toluene diisocyanate, and diphenylmethane diisocyanate which falls within the scope of the reactant of the instant claims. It is noted that it is not made from the intermediates of the instant claims. However, it is not seen that the final products of the instant claims and the patentee are distinguishable based on the difference in intermediates used to make them because the two final products would both be expected to have the same moieties within them after the reaction has completed based on the natures of the two reactions. Note the abstract; column 4, lines 16-67, particularly 21-23, which falls within the scope of "sealant" and which "flexible" implies the instantly claimed low modulus in the absence of plasticizer, 40-56; column 5, lines 1-67, particularly 31 and 61 of which the lower endpoint reads on the instantly claimed amount of diphenylmethane diisocyanate; column 6, lines 1-67; and the remainder of the document. It is the examiner's position that some paint exists which will adhere to the cured product of the patentee, possibly ones that contain moieties which can react with the endgroups of the patentee's urethane or with the urethane groups themselves, e.g. the hydrogens of the urethane groups, and thus these polymers are necessarily "paintable in the absence of primer". Based on the molecular weights of the polyether polyols of the patentee at column 6, lines 21-30, there would necessarily exist moieties in the patentee's polyurethanes which read on the instant claims 12-21. The patentee is

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silent regarding the modulus except for the discussion of properties which relate to modulus.

The patentee is silent regarding the other properties of the instant claims also. The burden is on the applicant to show that the polyurethanes of the patentee having the properties described by the patentee do not necessarily and inherently possess the moduli of the instant claims 1 and 22 and the tensile strength of the instant claim 23 and the elongation of the instant claim 24 because the PTO has no facilities to do such testing, and the polymers of the patentee appear to be otherwise the same as those of the instant claims and therefore must have the same properties.

The added polyols C of column 7, lines 42-51 et seq. are the chain extenders of the instant claims 35-36 and 67-68. Claims 66-68 are taken as reading on the reaction product of the multiple components recited in claim 37 based on the preamble language.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the above discussed combinations of ingredients and amounts so as to make the instantly claimed reaction product from the disclosure of the patentee because the patentee encompasses these ingredients and amounts and they would have been expected to give a polyurethane having the properties disclosed by the patentee.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the ingredients of the instant claims 26-34 and 66 in the compositions of the patentee because they are well known polyurethane additives which would have been expected to give their known functions, as described by their general descriptors as used in the instant claim 26, to the composition of the patentee.

6. Claims 5 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base

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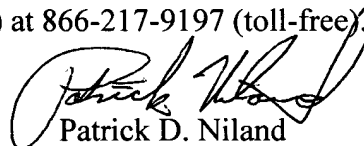
claim and any intervening claims. The prior art does not describe the limitations of these claims nor provide rationale to modify the prior art to use these limitations.

Claims 37-65 and 69-78 are allowable over the prior art considered. The prior art does not disclose the multicomponent compositions nor the methods of making them of the instant claims nor provide rationale to modify the prior art into these multicomponent compositions and methods.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Patrick D. Niland  
Primary Examiner  
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